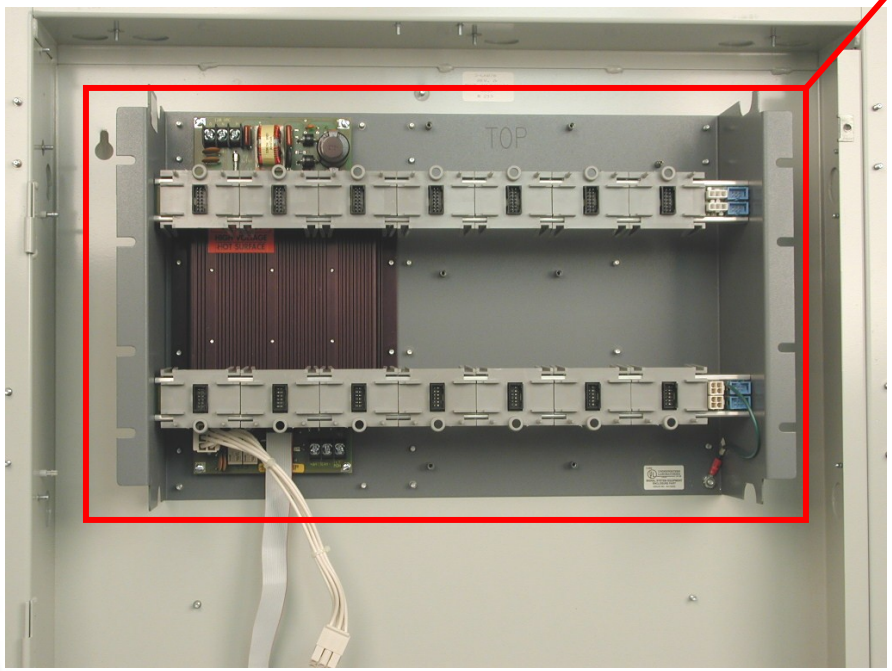
Synergy™ enabled

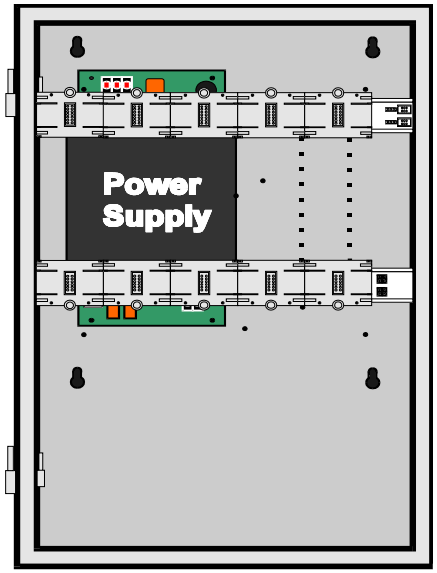
EST3 Life Safety Hardware

Basic Assembly



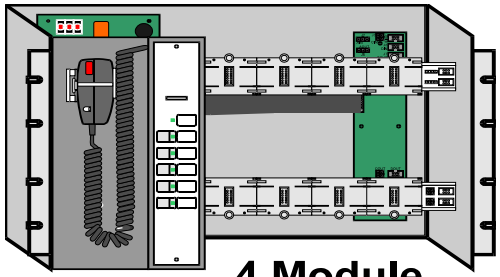
- **Chassis**
  - **Footprints for Power Supplies**
  - **Full Foot Print**
  - **Half Foot Print**

Basic Chassis Assemby



CAB5

7 Module

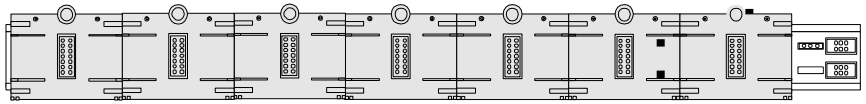


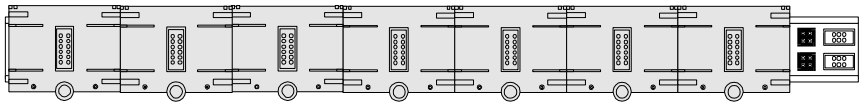
4 Module

chassis6

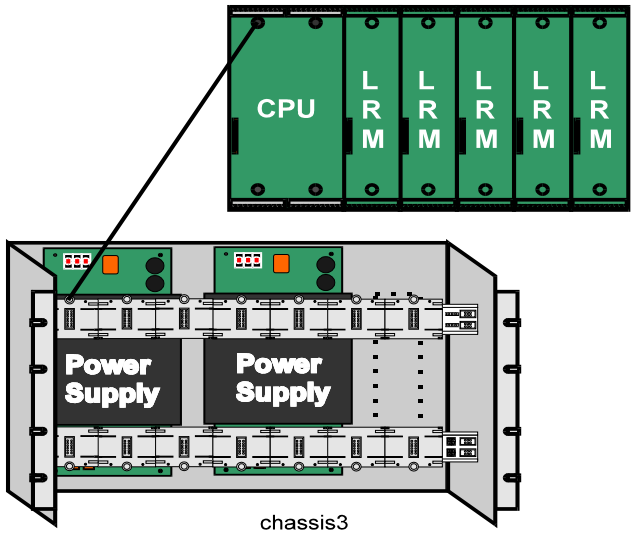
Local Rail

- Power
  - +5 Volts
  - +24 Volts
- RS-485 Communication
  - System Data
  - Audio Data
- Address Select
- All Fail





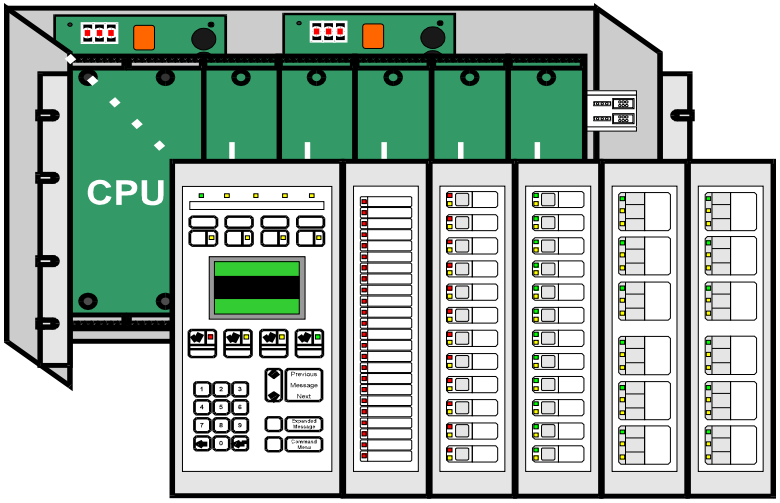
Basic Assembly



chassis3

- LRMs (Local Rail Modules)
  - Building Wiring Interface
  - Control Display Driver

Basic Assembly

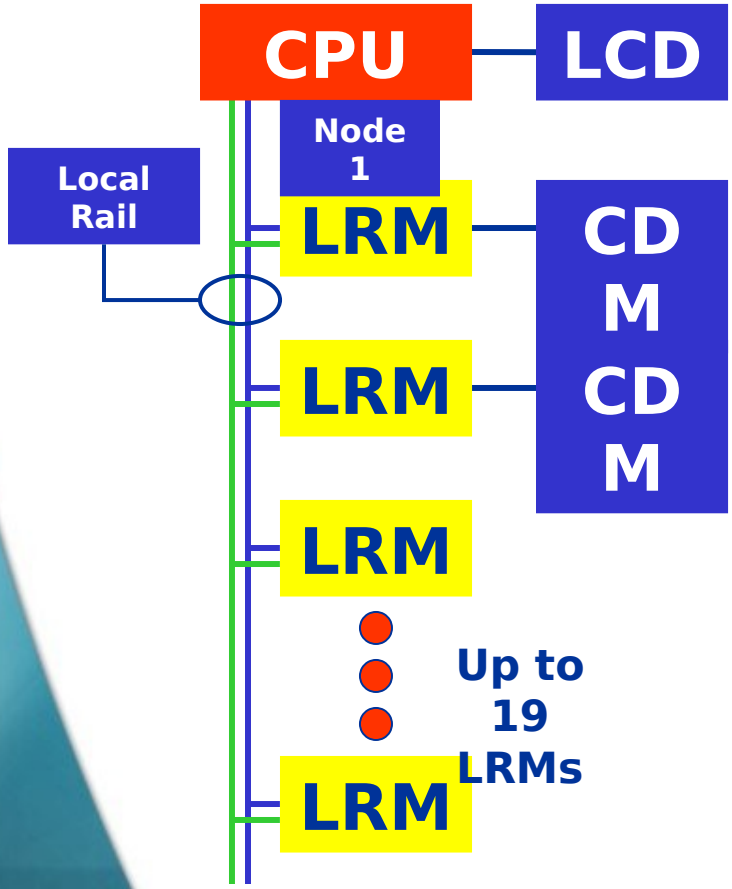


chassis4

- Control Display Modules
  - User Interface
  - Emergency User
  - Maintenance User

- **Cabinets… Chassis Space**
  - no chassis, 5 LRMs
  - 1 chassis, 7 LRMs
  - 2 chassis ,14 LRMs
  - 3 chassis, 21 LRMs
- **Mounting**
  - Lobby
  - Closet

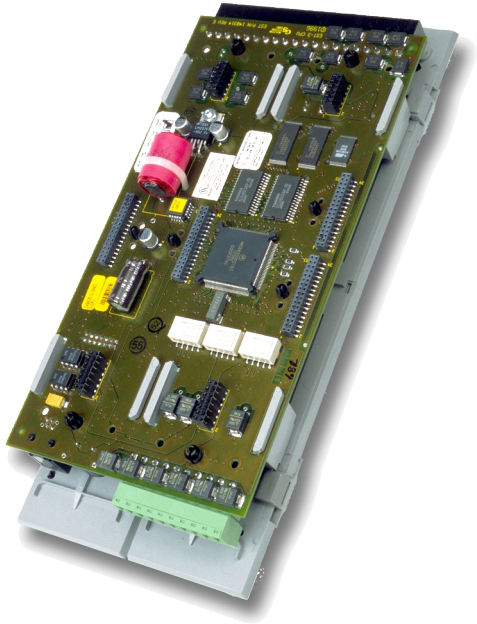
Central Processor Unit Module



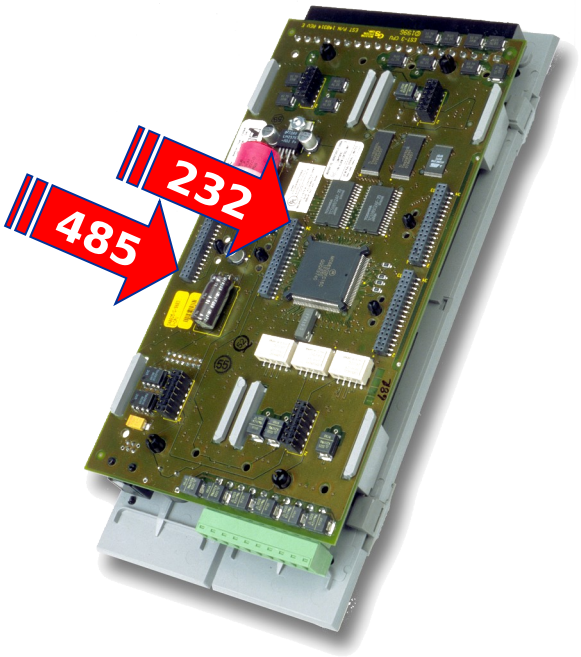
- One per node, takes 2 module spaces
- Downloadable firmware
- Up to 1750 history events
- RS-485 Communication Channels to Local Rail

Central Processor Unit Module

- Alarm, supervisory, trouble contacts form ‘C’ bypassed only in test mode
- Watchdog circuit
- Built-in test functions
- Monitor ground fault detection
- Low voltage memory write protection
- Service LEDs
- Internal clock calendar /w leap year

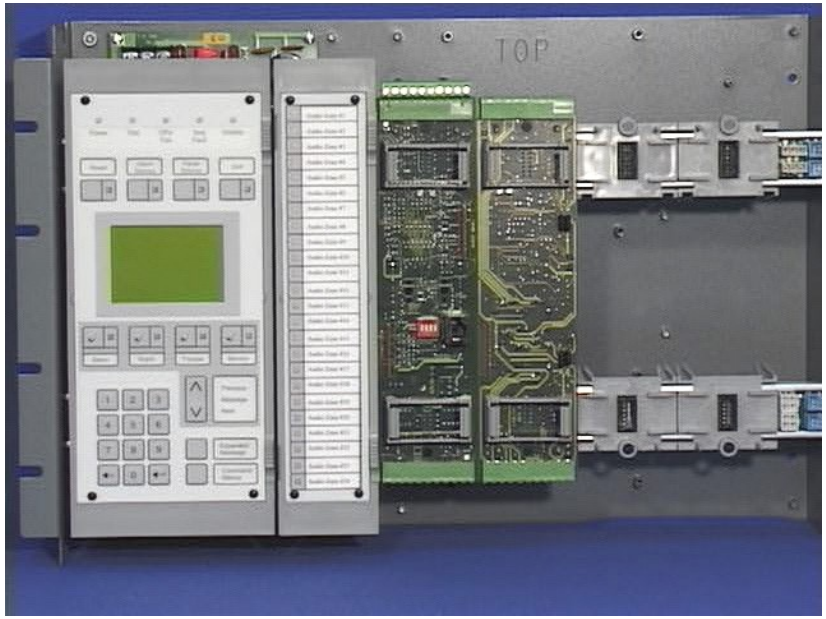


CPU Plug-Ins

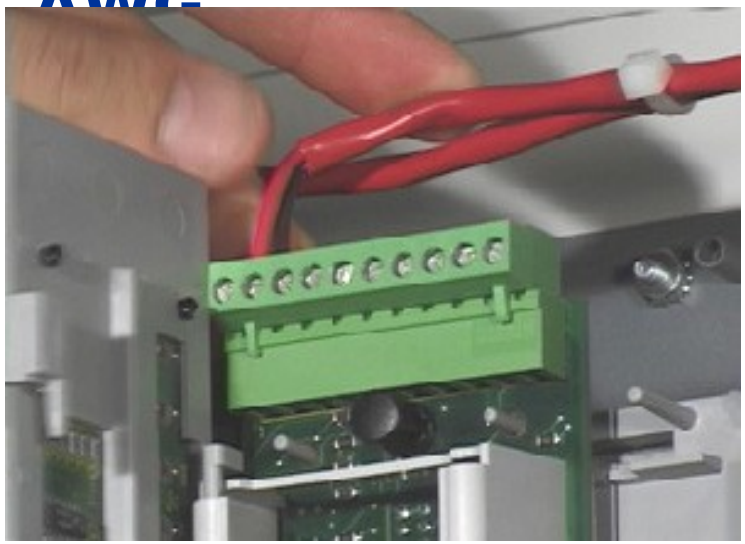


- Expansion Slots / Connectors
  - **1 RS-485 Network Communication Channel**
  - **2 RS-232 Communication Channels**
    - **Printers, CIS Interface, Fireworks**
  - **RJ45 RS232 Download connector**

Local Rail Modules



- Plug to system rails
- Interface EST3 to building wiring
- Plug-in terminal blocks, #18 to #12 AWG



Local Rail Modules

- Non-Volatile memory for program & data
- Continual internal self-checks
- Common communication and display software on each module
- Supports control display modules which are independent of LRM type
- Maximum of 8A draw from a point on the rail

Local Rail Module Types

- Central processor unit module
- Signature data controllers
- Initiating device circuit module
- Audio amplifier modules
- Security access control module
- Modem communicator (Qtr 1/01)
- Switch / LED support module
- Off premise signaling module
- Power supply module

Signature Data Controller

3-SSDC

- 3-SSDC 1 loop per module
- 3-SDDC 2 loops per module
- 3-SDC plugs into a SSDC to convert it to two loops
- Interfaces Intelligent Signature devices to EST3
- 125 detectors, 125 modules addresses per circuit
- Up to 5 loop rail modules per node, 10 SIGA loops / panel

Signature Data Controller

- Circuit alarm detection <= 750 ms
- Standalone operation
- Style 7 or style 4
- ‘T’ taps allowed on class ‘B’
- Ground fault by circuit and modul
- NV memory for program & configuration data
- Mapping of devices electrical location
- Automatic device addressing

3-AADC Loop Controller

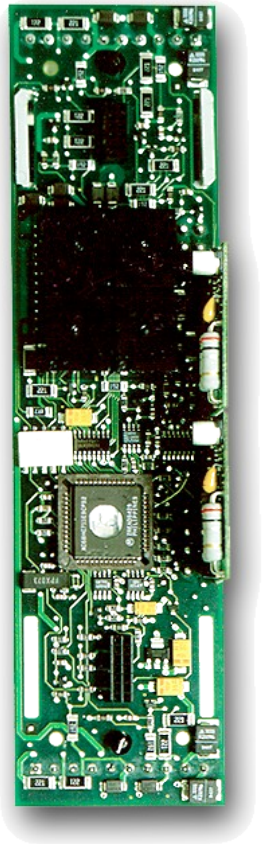
- Interfaces Addressable Analog Devices
- 1 loop per module
- 99 Detectors, 99 Modules / loop
- Up to 10 Controllers / node
- Ckt alarm detection <=7 seconds
- Ground fault / loop, NOT by module
- No Mapping
- Manual Detector Addressing

Initiating Device Circuit Module

- 8 style ‘B’ inputs
- Alarm, supervisory, monitor
- N.O. Or 2 wire smoke devices
- Supports up to 30 photo or 50 ion
- Verified, non-verified by circuit
- Programmable verification reset & retard periods

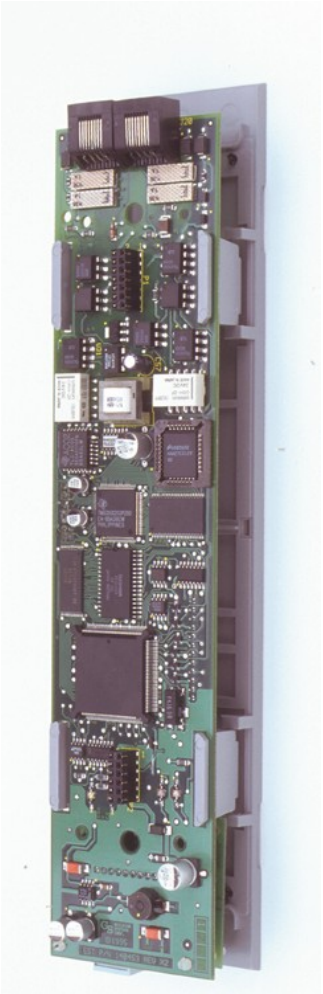
Initiating Device Circuit Module NACs

- 4 circuits convertible to outputs
- Style ‘Y’
- Audible, visual, ancillary
- Operates reversing polarity appliances
- 24vdc @ 3.5A, or 70vrms @ 100W
- Electronic **POWER** limiting
- Power from rail, 8A total for module
- Two Single Channel Riser
- Two circuits served by one riser



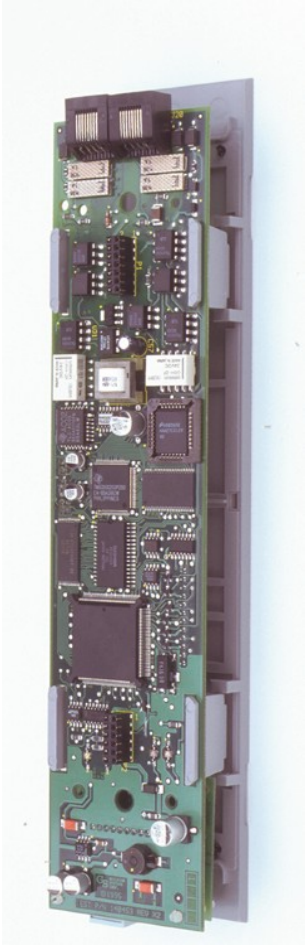
Modem Communicator

- **3- MODCOM**
  - **dual line dialer (DACT)**
    - **SIA DCS**
    - **Contact ID**
    - **4/2, 3/1**
  - **Survivability**
  - **Buffer 500 events / priority**
  - **80 different monitor stations**
    - **Split or multi reporting**
    - **255 accounts (tenants)**
  - **Multiple MODCOMs per network**
  - **Phone line friendly**



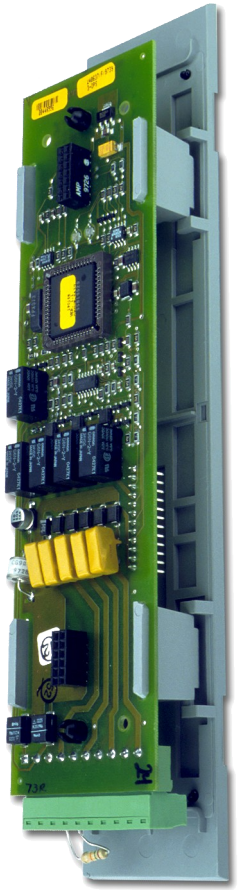
Modem Communicator

- **3- MODCOM**
  - **modem communicator**
  - **access control database downloads**
  - **DACT alarm functions over-ride modem operations**

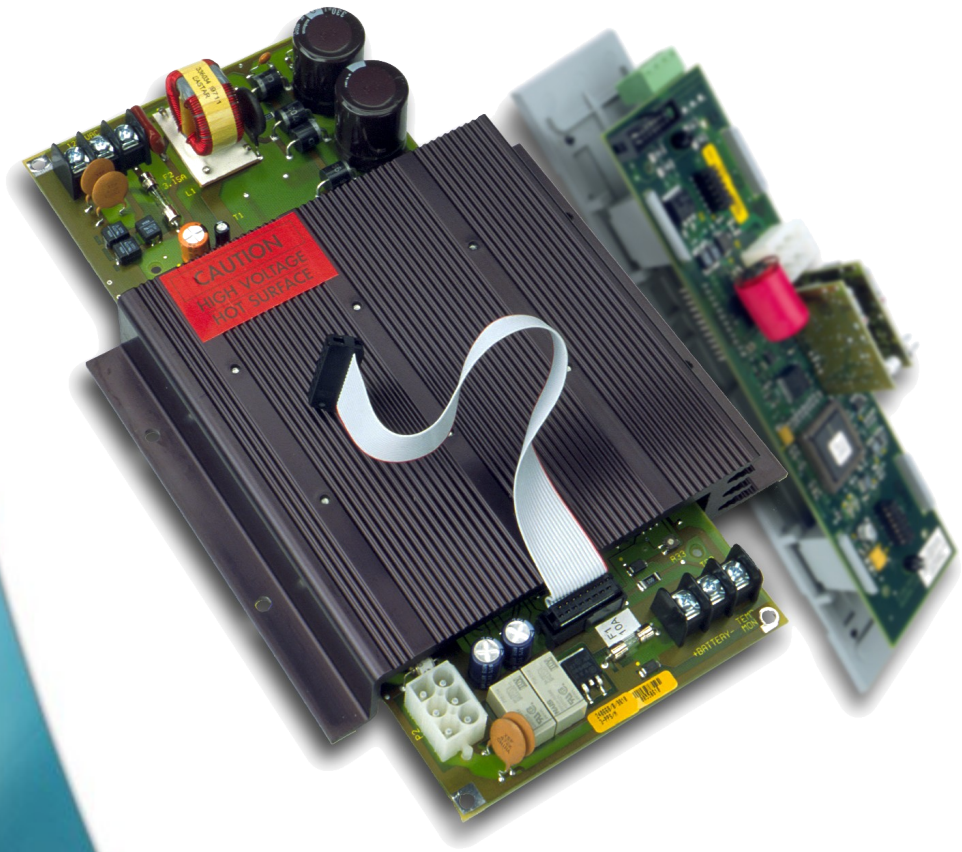


Off Premise Signaling Module

- Alarm, trouble, & supervisory outputs
- Trouble contacts
- ‘Old’ & ‘new’ reverse polarity connections
- Local energy municipal loop
- Electronic current limiting



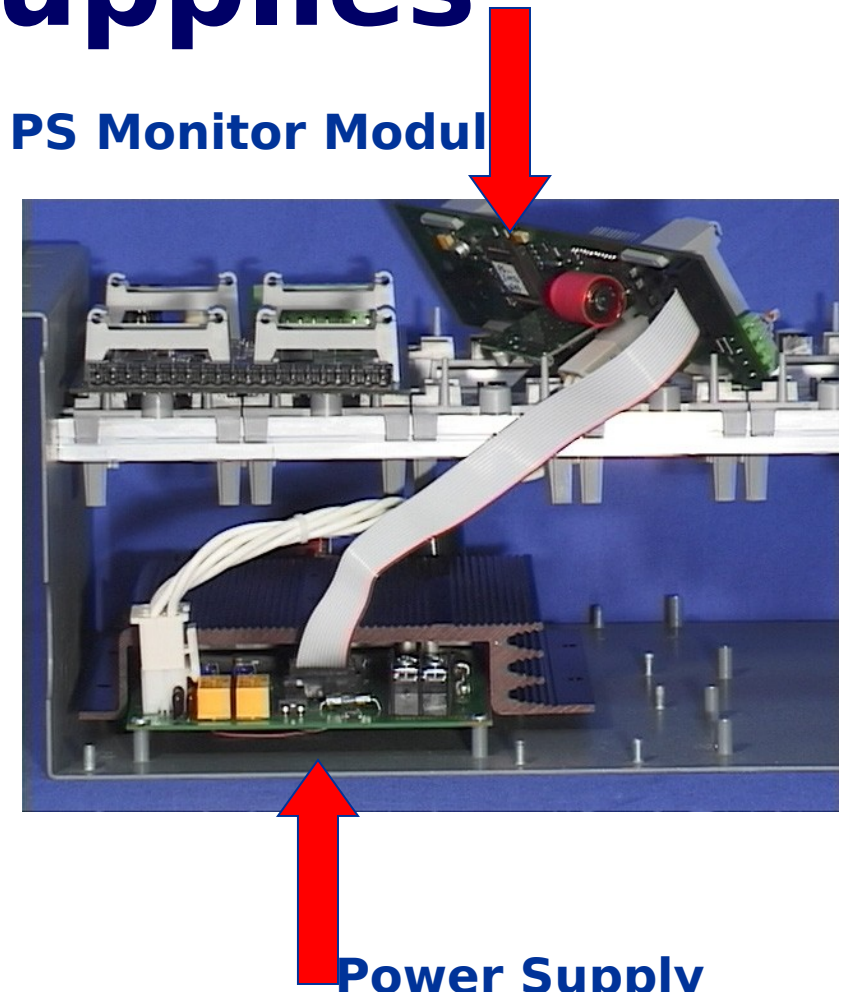
Power Supplies



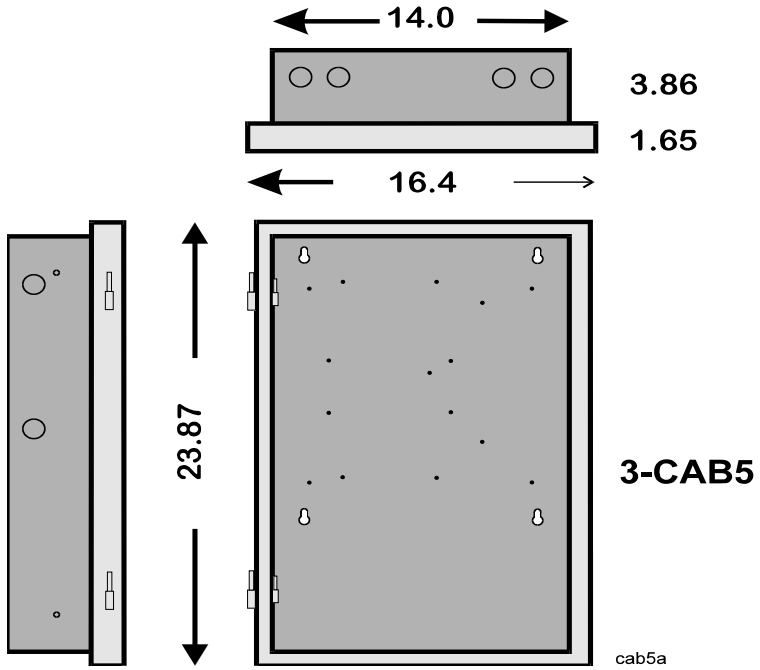
- Master and Booster
- Uses footprint & rail space
- Operate /w parallel output
- Switch mode, 80% efficiency
- Input 120vac or 230vac

Power Supplies

- Output 24vdc @ 7.0A
- Two auxiliary outputs @ 3.5A
- Charges up to 65 AH
- Automatic dual rate
- Temperature compensated
- AC brown & restore
- Electronic current limiting
- Monitors heat sink temperature

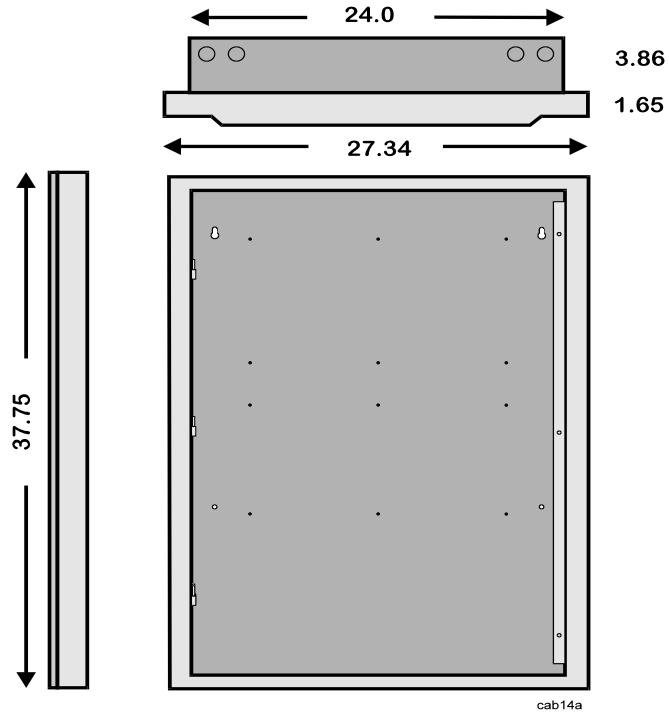


Lobby Mount 3-CAB5



- 3-CAB5
- 5 rail spaces
- battery 10AH
- gray wallbox
- gray or red doors

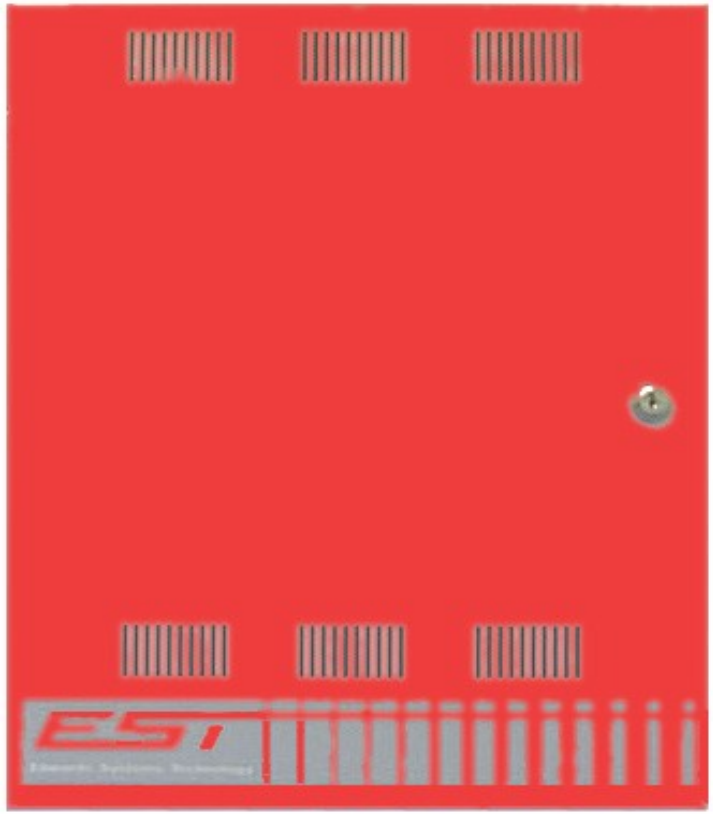
Lobby Mount 3-CABxx



- 3.86 depth, 17AH
- 3-CAB7, 1 chassis
  - Box 23.25H, Door 25.5
- 3-CAB14, 2 chassis
  - Box 35.5H, Door 37.75
- 3-CAB21, 3 chassis
  - Box 47.75H, Door 50.0
- gray wall box
- gray or red doors

3-RCCxxR Closet Mount

- 25” Wide, 5.5” deep, 65 AH Batteries
- 3-RCC7R 1 Chassis
  - Box 23.975” high
- 3-RCC14R 2 Chassis
  - Box 36.125” high
- 3-RCC21R 3 Chassis
  - Box 48.375” high
- Red wall box, red doors



EST3 Life Safety Hardware

Thank You!